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(54) Title: POLYPEPTIDE DENDRIMERS AS UNIMOLECULAR CARRIERS OF DIAGNOSTIC IMAGING CONTRAST AGENTS, BIOACTIVE SUBSTANCES AND DRUGS

(57) Abstract: The invention describes new polypeptide dendrimers and processes for the synthesis of the same. The polypeptide dendrimers of the invention have a structure which consists of a multifunctional core moiety from which highly branched polypeptide chains, formed by short peptide branching units, extend radially outwards. The outermost branches surround a lower density space with hollows and channels into which bioactive substances employed in diagnosis and therapy can be entrapped or covalently linked. For these properties the said polypeptide dendrimers are particularly useful in a number of areas in biology and medicine as carriers for the delivery of bioactive substances, including drugs, or as carriers of bacterial, viral and parasite antigens, gene-therapy compounds and diagnostic imaging contrast agents.



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